



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,688	01/04/2002	Janos Fekete	84.1003	7796
7590	09/21/2004			
			EXAMINER	
			LEE, RICHARD J	
			ART UNIT	PAPER NUMBER
			2613	
DATE MAILED: 09/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/019,688	FEKETE, JANOS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Richard Lee	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 5-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 5-15 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____ .   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: ____ .                                   |

1. The drawings are objected to because all diagrammatic blocks are required to be labeled to indicate contents or function (37 C.F.R. 1.83(a), 1.84(o)). Therefore, the diagrammatic blocks as shown in Figure 1 of the drawings should be labeled. Correction is required.

2. Claims 9, 10, and 15 are objected to because of the following informalities:

- (1) claim 9, line 6, after "according", "to" should be properly inserted for clarity;
- (2) claim 10, line 6, after "according", "to" should be properly inserted for clarity; and
- (3) claim 15, line 6, after "according", "to" should be properly inserted for clarity.

Appropriate correction is required.

3. Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For examples:

- (1) claim 14 is dependent from and identical to claim 7 and as such does not further limit claim 7, thus rendering the claim indefinite; and
- (2) claim 15 is dependent from and identical to claim 8 and as such does not further limit claim 8, thus rendering the claim indefinite.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peli (6,611,618) in view of Meijer (5,097,326) and Aubin (4,658,427).

Peli discloses a wide band image enhancement unit as shown in Figures 4, 5, 7, and 13, and substantially the same set of equipment to aid orientation of a blind person (see columns 13-14) as claimed in claims 5 and 10, comprising substantially the same device attached to a carrying unit which is attached to a surface of a body of the blind person (see column 13, lines 53-57, column 14, line 23 to column 15, line 2), and an input unit connected to the device (see Figures 4 and 13, column 9, lines 23-47); wherein the device comprises a sensing unit (see column 9, lines 23-47) including a camera, a processing unit (i.e., 24, 26 of Figure 4) connected to the sensing unit; wherein the carrying unit comprises spectacles able to be positioned on a head of the blind person (see Figure 13, column 13, lines 53-57, column 14, line 23 to column 15, line 2), the camera being fixed to the spectacles (see column 13, lines 53-57, column 14, line 23 to column 15, line 2), and the processing unit comprising a small-sized microprocessor (i.e., 24, 26 of Figure 4) having an analogue input, and an output (see Figure 4).

Peli does not particularly disclose, though, the followings:

- (a) the sensing unit being a CCD camera, a picture memory connected to the processing unit for storing pictures, a sound memory connected to the processing unit for storing sounds, the picture memory and the sound memory being connected to the external bus of the microprocessor as claimed in claim 5;
- (b) a loudspeaker connected to the processing unit for emitting acoustic signals, the loudspeaker being connected to the output of the microprocessor; an external bus; a joining

module, the CCD camera being connected to the analogue input of the microprocessor through the joining module as claimed in claim 5;

(c) the microprocessor has a controller unit for reading in and processing picture information and sound information, a first internal memory connected to the controller unit for storing the picture information, and a second internal memory connected to the controller unit for storing the sound information, the device further comprising an identifying unit connected to the first and second internal memory units for searching according the picture information, and for connecting the picture information and the sound information as claimed in claim 10.

Regarding (a) to (c), Meijer discloses an image-audio transformation system as shown in Figures 1, 2, and 7, and teaches the conventional use of CCD cameras (see column 2, lines 34-37), a microprocessor (i.e., 26 of Figure 2) having a control unit for reading in and processing picture information and sound information (see digital memory 28 of Figure 2, column 4, lines 35-61, column 7, lines 13-19, columns 15-16), a first internal/picture memory (see 28 of Figure 2, column 4, lines 35-61, column 7, lines 13-19) connected to the controller unit for storing the picture information, and a second internal/sound memory (see column 4, lines 50-54) connected to the controller unit for storing the sound information, the device further comprising an identifying unit (i.e., as provided by the image to sound conversion process, see column 4, line 62 to column 5, line 50) connected to the first and second internal memory units for searching according the picture information, and for connecting the picture information and the sound information. It is noted that though Meijer discloses the picture memory and the sound memory being connected to the microprocessor, Meijer is silent as to the connection of the picture memory and sound memory being specifically connected to an external bus of the

microprocessor. However, Aubin discloses a sound production device as shown in Figure 3 and teaches the generic use of buses for connection between a microprocessor and memory (see 31-35 of Figure 3). It is therefore considered obvious to provide the bus configuration as taught by Aubin for connecting the microprocessor and picture and sound memories of Meijer. Aubin also teaches a loudspeaker (i.e., 7 of Figure 1) connected to the processing unit for emitting acoustic signals, the loudspeaker being connected to the output of the microprocessor (see Figure 1), and wherein the CCD camera (i.e., 1 of Figure 1) is connected to the analogue input of the microprocessor (i.e., 2-5 of Figure 1) through the joining module (i.e., 38 of Figure 3, and see column 3, lines 33-42). Therefore, it would have been obvious to one of ordinary skill in the art, having the Peli, Meijer, and Aubin references in front of him/her and the general knowledge of microprocessor units and loudspeakers within blind aid systems, would have had no difficulty in providing the CCD camera, the external bus configuration system of the microprocessor for connection to the picture and sound memories, joining module system, and loudspeaker system for connection to the output of the microprocessor all as taught in the combination of Meijer and Aubin as part of the blind person equipment system of Peli for the same well known storage of pictures and sounds for further processings and audio outputting from loudspeakers for aiding the blind purposes as claimed.

6. Claims 6-9, 11, and 13-15 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Peli, Meijer, and Aubin as applied to claims 5 and 10 in the above paragraph (5), and further in view of Sears.

The combination of Peli, Meijer, and Aubin discloses substantially the same set of equipment to aid orientation of a blind person as above, further including wherein the

microprocessor (i.e., 26 of Figure 4) is fixed to the spectacles (see column 9, lines 23-47, column 13, line 53 to column 14, line 4).

The combination of Peli, Meijer, and Aubin does not particularly disclose, though, wherein the picture memory, the sound memory, and the loudspeaker are fixed to the spectacles; and wherein the microprocessor has a data transfer input, the device further comprises a writing unit having microphone for entering verbal information, the writing unit and the microphone being temporarily connected to the data transfer input of the microprocessor as claimed in claims 6, 7, 11, 13, and 14. However, Sears et al discloses a voice output reading system with gesture based navigation as shown in Figures 2 and 4, and teaches the conventional use of loudspeakers being fixed to spectacles (see 107 of Figure 4) and the use of a data transfer input (i.e., as provided by the buses, see column 6, lines 52-67) and a writing unit (i.e., voice recognition system, see column 15, lines 54-67) having microphone for entering verbal information, the writing unit and the microphone being temporarily connected to the data transfer input of the microprocessor (see column 6, lines 52-67, column 7, lines 12-23, column 15, lines 54-67, column 21, lines 25-33). In addition, since Sears et al teaches the particular use of a computer with memory storages for connection to the spectacle 100 (see column 6, lines 52-67, column 21, lines 7-33), it is therefore considered obvious that the picture and sound memories as provided by Meijer may certainly be implemented within the spectacles of Sears. Therefore, it would have been obvious to one of ordinary skill in the art, having the Peli, Meijer, Aubin, and Sears et al references in front of him/her and the general knowledge of spectacle devices for the blind, would have had no difficulty in providing the loudspeaker connection to the spectacle and writing and microphone system configuration for entering verbal information and for connection

to the data transfer input of the microprocessor as taught by Sears as well as the inclusion of the picture and sound memories of Meijer within the spectacles of Sears all as part of the blind aid system within Peli for the same well known microphone inputting for voice recognition and audio output of information within a spectacle device for aiding the blind purposes as claimed.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Peli, Meijer, and Aubin as applied to claims 5 and 10 in the above paragraph (5), and further in view of Moricca et al (3,993,407).

The combination of Peli, Meijer, and Aubin discloses substantially the same set of equipment to aid orientation of a blind person as above, but does not particularly disclose wherein the device further comprises an amplifier connecting the loudspeaker to the output of the microprocessor as claimed in claim 12. It is noted that though Sears et al and Aubin teach a loudspeaker system (see 7 of Aubin, 47 of Sears et al) for connection to the output of microprocessors, both Sears et al and Aubin are silent as to the inclusion of an amplifier for the loudspeaker as claimed. In any event, the particular use of amplifier devices for connection to loudspeakers are however old and well recognized in the art, as exemplified by Moricca et al (see 96 of Figure 8, column 4, lines 30-59). Therefore, it would have been obvious to one of ordinary skill in the art, having the Peli, Meijer, Aubin, and Moricca et al references in front of him/her and the general knowledge of audio amplifications, would have had no difficulty in providing the amplifier device for connecting the loudspeaker to the output of the microprocessor as taught by Moricca et al, Sears, and Aubin as part of the blind aid system within Peli for the same well known audio amplification of voice so as to be clearly heard by the blind and people with difficulty hearing purposes as claimed.

Art Unit: 2613

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Siwoff discloses a video spectacles.

Samiy discloses a system and method for projecting an image onto a retina.

Rohen discloses a virtual graphics display capable of presenting icons and window to the blind computer user.

Coles discloses a binaural sight system.

Deptta discloses a portable orientation system.

Badgley discloses a memory scanning device.

Cho discloses an apparatus for creating visual power of a blind person.

9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Art Unit: 2613

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (703) 308-6612. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m., with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group customer service whose telephone number is (703) 306-0377.

  
RICHARD LEE  
PRIMARY EXAMINER

Richard Lee/rl

  
9/17/04